



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/720,698

11/25/2003

Zachariah Stockwell

50103-543

3035

49745 7590 12/23/2008
SEAGATE TECHNOLOGY LLC
c/o MCDERMOTT WILL & EMERY LLP
600 13TH STREET, NW
WASHINGTON, DC 20005-3096

EXAMINER

ZARE, SCOTT A

ART UNIT

PAPER NUMBER

3687

MAIL DATE

DELIVERY MODE

12/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/720,698	Applicant(s) STOCKWELL ET AL.	
	Examiner SCOTT A. ZARE	Art Unit 3687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 1-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1-20 are objected to because of the following informalities: In line 8 of claim 1, the colon following the term "location" should be omitted. Claims 2-20 are dependent on claim 1 and acquire the same deficiency as set forth above. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In regard to claims 1-16, these claims are directed toward a computer-implemented method comprising various steps. In order for a method claim to qualify as a patentable eligible process under 35 USC §101, the process must (1) be tied to another statutory class or (2) transform underlying subject matter. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). Thus, to qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example, by

Art Unit: 3687

identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15, 17 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by *Jenkins et al.* (US 2002/0188499, referred hereinafter as “*Jenkins*”, filed October 29, 2001).

In regard to claims 1 and 17, *Jenkins* teaches a computer-implemented method for distributing parts to customer locations in a volume-based fair share mode, comprising the steps:

- prioritizing requests for parts from inventory (see paragraphs 178-180);
- prioritizing locations that have need for the parts (see paragraphs 178-180);
- and
- forming a shipment plan by iteratively:

Art Unit: 3687

- assigning a defined minimum size allotment of the parts (see paragraph 181 and 189, disclosing “major shipping quantity”) to the location having the current highest priority (paragraph 236); and
- re-assigning the priorities of the locations until all of the parts from inventory have been assigned or no location needs more of the parts assigned (see paragraph 272, disclosing “recalculat[ing] priority values”).

In regard to claim 2, *Jenkins* teaches a method further comprising defining the minimum size allotment (see paragraph 181 and 189, disclosing “major shipping quantity”).

In regard to claim 3, *Jenkins* teaches a method wherein each location having a need for the parts from inventory has a percentage need for said parts, and the step of forming a shipment plan includes assigning the minimum size allotment to a highest priority location in each iteration and thereafter re-assigning the priorities such that each location having a need is driven to the same percentage need (see paragraph 205).

In regard to claim 4, *Jenkins* discloses all elements of the claimed invention, but fails to explicitly disclose performing a pallet size pass on the shipment plan. (See paragraph 266.)

Art Unit: 3687

In regard to claim 5, *Jenkins* discloses a pallet size pass based on a threshold quantity at which multiples of shippers are cut in full pallets. (See paragraph 266.)

In regard to claim 6, *Jenkins* discloses a pallet quantity that is a quantity of parts that constitutes a full pallet. (See paragraph 266.)

In regard to claim 7, *Jenkins* discloses a shipper that passes through the pallet size pass that has a number of parts greater than the threshold quantity and equal to or less than the pallet quantity. (See paragraph 266.)

In regard to claim 8, *Jenkins* discloses a volume based filter pass on the shipment plan. (See paragraph 266.)

In regard to claim 9, *Jenkins* discloses a based filter pass based on a minimum shipment quantity defining a smallest amount of parts for a specific location or part type. (See paragraph 189, disclosing “major ship quantity”)

In regard to claim 10, *Jenkins* discloses wherein the volume based filter pass is based on a percentage impact threshold that is a function of a recommended shipper and a target inventory for a specific location or part type (See paragraph 206, disclosing “fair-share allocation”)).

Art Unit: 3687

In regard to claim 11, *Jenkins* discloses wherein the parts are shipped from a single source (see Claim 19).

In regard to claim 12, *Jenkins* discloses wherein the parts are shipped from multiple sources, and further comprising determining splitting the source of the parts to fulfill the requests for parts from the locations (see paragraph 224).

In regard to claim 13, *Jenkins* discloses wherein the determining includes forming a balanced supply/demand (See entire disclosure).

In regard to claim 14, *Jenkins* discloses wherein the determining further includes geographic/local sales rules in which specified geographic and local sales shipments are prioritized over optimization of shipments (See paragraph 234).

In regard claim 15, *Jenkins* discloses wherein the determining further includes a business rule filtering in which specified business rules are prioritized over optimization of shipments (See paragraph 234).

In regard to claim 20, *Jenkins* teaches a system for determining distribution of goods to customer locations, comprising:

a processor that receives requests for parts to be delivered to customer locations (see paragraphs 57-58 and FIGS 1A-1B); and

means for forming a shipment plan of the goods to the customer locations on a volume-based fair share basis (See paragraph 232).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Jenkins* in view of *Chappel* (US 7,236,940).

In regard to claim 16, *Jenkins* fails to explicitly disclose creating a set of all supply demand scenarios with all possible combinations of fully providing available supply to a demand point in a matrix, and subsequently performing a sum of squares on the matrix, with the highest sum of squares forming a shipment plan.

Chappel teaches a method and system for accessing and planning business operations utilizing rule-based statistical modeling including creating a set of all supply demand scenarios with all possible combinations of fully providing available supply to a demand point in a matrix, and subsequently performing a sum of squares on the matrix, with the highest sum of squares forming a shipment plan (See column 7 at lines 45-47, via a statistical business model calculating the sum-of-squares).

Therefore, it would have been obvious for a person having ordinary skill in the art at the time the invention was made to modify Jenkins to include old and well know methods of statistical modeling as taught by Chappel in order to calculate a deviation from a mean, the highest deviation representing the highest priority.

Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Jenkins* in view of *Benda et al.* (US 6,937,992, referred hereinafter as "*Benda*").

In regard to claim 18, *Jenkins* fails to explicitly disclose performing lot sizing optimization after the shipment plan is formed.

Benda teaches a transport vehicle capacity maximization logistics system and method including performing lot sizing optimization after the shipment plan is formed (See col. 11 at lines 56-58, via optimization of pallets for each given SKU).

From the disclosure of *Benda*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method for order based planning as taught by *Jenkins* to include optimizing shipments before they are delivered in order to decrease shipping costs.

In regard to claim 19, *Jenkins* fails to explicitly disclose splitting the source of the parts when there are multiple sources of the parts.

Benda teaches a transport vehicle capacity maximization logistics system and method including splitting the source of the parts when there are multiple sources of the

Art Unit: 3687

parts (See col. 14 at lines 12-14, via merchandise that is shipped from multiple sources being optimized at a cross-dock for shipment to the same distributor).

From the disclosure of *Benda*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method for order-based planning as taught by *Jenkins* to include optimizing shipments before they are delivered in order to decrease shipping costs.

Response to Arguments

Applicant's arguments, see Remarks, filed 08/19/2008, with respect to the rejection(s) of claim(s) 1-3, 17, and 20 under 35 USC §102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art reference. As previously discussed in the current rejection under 35 USC §102, *Jenkins* cures the deficiency regarding the previously relied upon prior art reference of *Crampton* by teaching creating and assigning a minimum size allotment of parts to a location with the current highest priority, and subsequently reassigning (i.e., recalculating) priorities of the location.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT A. ZARE whose telephone number is (571)270-3266. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Gart can be reached on (571) 272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew S Gart/
Supervisory Patent Examiner, Art
Unit 3687

Scott A Zare
Art Unit 3687
December 21, 2008

Application/Control Number: 10/720,698
Art Unit: 3687

Page 11